

# Semi-Automatic Science Workflow Synthesis for High-End Computing on the NASA Earth Exchange

Completed Technology Project (2012 - 2015)



## Project Introduction

Enhance capabilities for collaborative data analysis and modeling in Earth sciences.

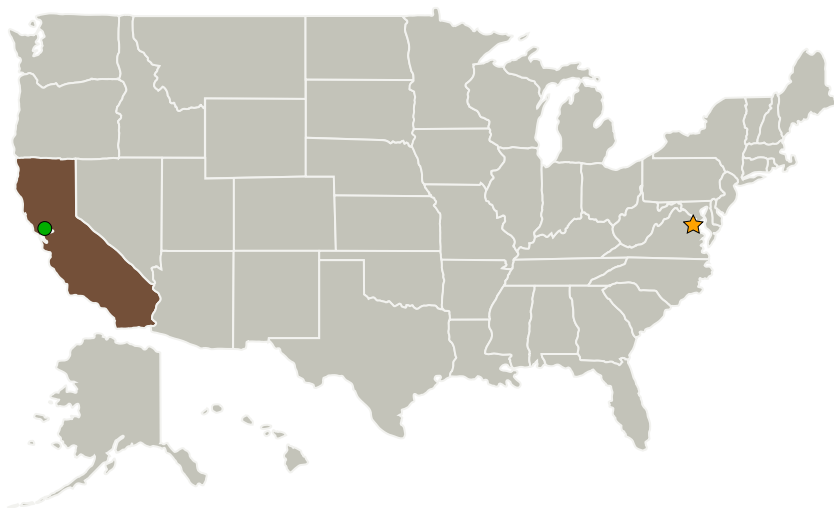
Develop components for automatic workflow capture, archiving and management.

Enable workflow migration between commodity systems and supercomputer environment at NASA.

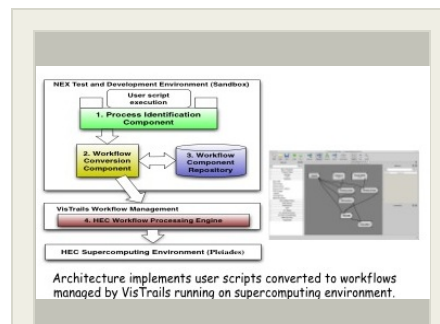
## Anticipated Benefits

SMAP

## Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★ NASA Headquarters(HQ)	Lead Organization	NASA Center	Washington, District of Columbia
● Ames Research Center(ARC)	Supporting Organization	NASA Center	Moffett Field, California



Project Image Semi-Automatic Science Workflow Synthesis for High-End Computing on the NASA Earth Exchange

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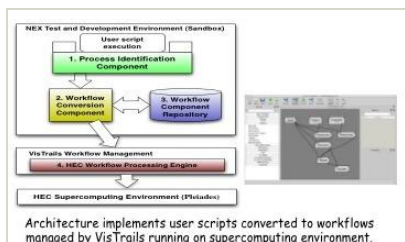
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## Primary U.S. Work Locations

California

## Images



**11021-1360181448186.jpg**

Project Image Semi-Automatic Science Workflow Synthesis for High-End Computing on the NASA Earth Exchange  
(<https://techport.nasa.gov/image/1615>)

## Organizational Responsibility

### Responsible Mission Directorate:

Science Mission Directorate (SMD)

### Lead Center / Facility:

NASA Headquarters (HQ)

### Responsible Program:

Earth Science

## Project Management

### Program Director:

George J Komar

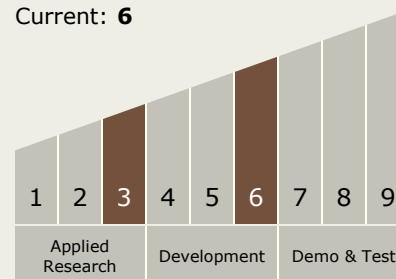
### Principal Investigator:

Ramakrishna R Nemani

## Technology Maturity (TRL)

Start: 3

Current: 6



## Technology Areas

### Primary:

*Continued on following page.*

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## Technology Areas (cont.)

- TX11 Software, Modeling, Simulation, and Information Processing
  - └ TX11.4 Information Processing
    - └ TX11.4.4 Collaborative Science and Engineering

## Target Destination Earth